Notes on Clastoptera (Cercopidae.)

By C. F. Baker, Auburn, Alabama.

Clastoptera lineaticollis Stal. (= Clastoptera delicata Uhl.) It think the above indicated synomymy will be verified by an examination of the types. Stal's name will take precedence. Stal says distinctly of the thorax in lineaticollis, "Lineis pluribus transversis fuscis." In spite of this Mr. Ball has referred it to obtusa (see Ia. Acad. Sci., Vol. III.), even the western form of which never has more than two fuscous bands, while the Californian form under the name lineaticollis in his scheme is given as having the "pronotum entirely black."

Clastoptera binotata (Ball.) Mr. Ball has merged this manuscript species of Uhler's in delicata. I regard it as a good species. Among other things the pronotum in binotata is opaque and broadly, shallowly wrinkled, in delicata (lineaticollis) it is shining and nearly smooth. Binotata is further distinguished by the coarser sculpturing of the clavus. A variety of binotata occurs in California, having a greater extent of light coloring along the costa and a transverse light band across lower part of face.

According to recognized usage in zoological nomenclature Mr. Ball's "subsp. I. *lineata*" of *delicata* should be known as *delicata*. However, with the removal of *binotata*, there will be no necessity for the use of any name in this connection.

A similar state of affairs exists in connection with Mr. Ball's varieties of *proteus*. He mentions the fact that *saint-cyri* Prov. belongs to his "subspecies I," and yet applies the name *flava* to that subspecies. At the same time it is impossible that Fitch's varietal names should be utterly disregarded. Mr. Ball rearranges the known varieties to conform with his own ideas of their proper limits. This is entirely legitimate. But even in this new arrangement many of the forms must be identical with those studied by Fitch, and in these cases Fitch's names must be used.

Clastoptera osborni G. & B. This species appears in Mr. Ball's arrangement as a "subspecies" of obtusa, with pint and testacca as varieties. The pronotum in obtusa is shining and with about nineteen or twenty distinct, even wrinkles,

which rarely anastomose; in the type of *osborni* the pronotum is opaque, the wrinkles about twenty-eight, much finer and more indistinct than in *obtusa*, and irregular—freely anastomosing. The body is narrower than in *osborni* and the proportions of the clavus are different. The ocelli in *obtusa* are larger and nearer the front edge of vertex. Very light-colored specimens of *obtusa* occur, but these differ from *osborni* in the same manner. Mr. Ball's "Subspecies III" will become subspecies *testacea* (Fh.)

Clastoptera bimaculata n. sp. Q. Length 3 mm. Of the size and with the ground color of a small pale *C. xanthocephala*. Pronotum shining, with numerous fine, very faint wrinkles, which are straight and anastomose but little. Scutel coarsely scabrous. Clavus finely, evenly punctured. Inner discoidal, cell much larger than outer. Anterior half of pronotum and a large spot extending across middle of clavus and encroaching on corium, light yellow. Elytral callosities black. Face with a dark transverse shading across middle and about six dark arcs on either side of front above. Mesosternum black; all else below, excepting black tibial spines and two yellow annuli on fore tibæ, same as ground color above.

Described from a single female taken near Vera Cruz, Mexico, by Rev. H. Th. Heyde. This distinctly marked little form presents structural characters which will not admit it to any of our northern species. It may be a near relative of Uhler's Cuban stolida.

Calopteryx angustipennis Selys. (note bottom p. 199, ENT. News, Sept., 1899, P. P. Calvert). Two males of this species were sent to Mr. W. F. Kirby, British Museum (Natural History). Mr. Kirby says "We have only a single specimen, with a broken abdomen, and the size is just about the same as your two specimens (Selys, Syn. Calop., gives the abdomen of this specimen as "environ 55 mm." Hagen, Psyche, V, p. 244, gives 56 mm. Ohio and Pennsylvania specimens measure about 46 mm.). It is of a uniform green, whereas your specimens are much bronzed, especially on the vertex and prothorax. Otherwise I see no important differences. I thought I might have found some in the neuration, but there seems nothing tangible, especially as the neuration of your two specimens varies." A female (abdomen not perfect) was sent to Mr. Henshaw, Museum Comparative Zoology. Mr. Henshaw writes: "I have compared your ♀ Calopteryx angustipennis with the two in the Hagen collection without finding any specific differences. In breadth of wing your specimen is intermediate between the Berlin specimen and the one from Bee Spring, Ky."—E. B. Williamson.